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V.S.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/262,077 03/04/99 TAKANASHI

EXAMINER

H 1497/FPTOK16

IM62/0715

ART UNIT	PAPER NUMBER
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LEE, S

DATE MAILED:

1752

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/262,077	Applicant(s) Takanashi et al.
	Examiner Sin J. Lee	Group Art Unit 1752

Responsive to communication(s) filed on 03-04-99 and 06-07-99

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-5 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-5 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Starting from the last five lines of claim 1, applicants recite, “*they* may have an ether bond in the chain, . . . ”. It is vague as to what applicants meant by the term “*they*”. Appropriate correction or clarification is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kita et al (4,239,850).

Kita et al teach instant inventions of claims 1, 3-5 explicitly. See particularly col.1, lines 5-31, col.2, lines 32-36, col.5, lines 10-39, lines 47-54, Example 4. In their Example 4, Kita et al use 0.03 g (calculated to be 0.13% by weight) of behenic acid, which corresponds to the applicants' component (E) having the formula (I) wherein -X represents -COOH. As stated in In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976), "the disclosure in the prior art of any value within a claimed range is an anticipation of that range."

Since Kita et al teach the use of the behenic acid in an amount within the claimed range, and behenic acid has the boiling point of 306.0°C (at 60.0 Torr), Kita et al teach instant invention of claim 2 implicitly.

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Holman, III (4,634,657).

Holman, III teaches instant inventions of claims 1, 3-4 explicitly. See particularly col.2, lines 34-42, col.4, lines 35-45, col.6, lines 42-68, col.7, lines 1-29, lines 40-53, col.8, lines 43-62, col.9, lines 7-10, lines 34-38, col.10, lines 34-37, TABLE 1, Example 9. In his Examples 2 and 3, Holman, III uses 0.05 % of p-toluene sulfonic acid, which corresponds to the applicants' component (E) having the formula (I) wherein -X is -SO₃H. Since Holman, III discloses the amount of the sulfonic acid which is within the claimed range, Holman, III anticipates the claimed range for the amount of the compound having the formula (I). See In re Wertheim, supra.

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Since Holman, III teaches the use of the p-toluene sulfonic acid in an amount within the claimed range, and p-toluenesulfonic acid has the boiling point of 185.0 - 187.0°C (at 0.10 Torr), Holman, III teaches instant invention of claim 2 implicitly.

7. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pine (4,361,640).

Pine teaches instant inventions of claims 1-5 except for explicitly disclosing the claimed range of 0.001 to 0.3 weight % for the amount of the compound having the formula (I). See particularly col.1, lines 20-23, lines 61-68, col.2, lines 1-23, lines 27-33, col.4, lines 20-27, lines 58-62, lines 67-68, col.5, lines 1-15, col.6, lines 25-29.

With respect to claim 1, Pine teaches in col.4, lines 20-27 that a plasticizer can be present in his composition in amounts of 0 to 18% by weight, and he names mixed o,p-toluene sulfonamides as one of the six (not too many to choose from) useful plasticizers. Ortho or para toluene sulfonamides correspond to the applicants' component (E) having the formula (I) wherein -X represents $-\text{SO}_2\text{NHR}^2$. Therefore, it would have been obvious for one ordinarily skilled in the art to use the ortho or para toluene sulfonamides in the amount of 0 to 18% by weight since it is clearly taught in Pine. Also, in the case "where the [claimed] ranges overlap or lie inside ranges disclosed by the prior art," a *prima facie* case of obviousness would exist which may be overcome by a showing of unexpected results, In re Wertheim, supra.

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With respect to claim 2, since Pine meets the limitation of instant claim 1, and since the mixed o,p-toluene sulfonamides has the boiling point of about 214°C, Pine teaches the instant invention of claim 2 implicitly.

8. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legere (4,911,999).

Legere teaches instant inventions of claims 1-4 except for explicitly disclosing the claimed range of 0.001 to 0.3 weight % for the amount of the compound having the formula (I). See particularly col.1, lines 15-19, col.2, lines 17-22, lines 29-33, lines 44-58, col.3, lines 15-31, col.4, lines 56-68, col.5, lines 1-20, lines 46-58, col.6, lines 13-20, lines 62-66, col.7, lines 59-65.

With respect to claim 1, Legere teaches the use of thiourea, which corresponds to the applicants' component (E) having the formula (I) wherein -X represents -HNCONHR², in an amount 0.1-5% by weight. Therefore, it would have been obvious for one ordinarily skilled in the art to use the thiourea in the amount of 0.1-5% by weight, since it is clearly taught in Legere. Also, since Legere's range overlaps with the claimed range, a *prima facie* case of obviousness exists as to the claimed range. See In re Wertheim, supra.

With respect to claim 2, since Legere meets the limitation of instant claim 1 and also thiourea has the boiling point of 93.9 - 102.9°C at 8.8×10^{-4} to 2.1×10^{-3} Torr (i.e., thiourea has a very high boiling point), Legere teaches the instant invention of claim 2 implicitly.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is (703) 305-0504. The examiner can normally be reached on Monday-Friday from 8:30 am EST to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Janet Baxter, can be reached on (703) 308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599 for after final responses or (703) 305-7718 for all other responses.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0661.

S. J. L.

S. Lee
July 13, 1999


Janet Baxter
Supervisory Patent Examiner
Technology Center 1700